

### MODEL 8060

The Geotechnical Systems Australia Pty Ltd [Water Level Data Logger](#) has been designed for remote environmental monitoring. It is ideal for long term monitoring programs, providing a convenient method of recording changes in water level over time, in sumps, boreholes, tanks, rivers, dams and irrigation channels. The logger is housed in a tubular, stainless steel case which is suitable for lowering into bore holes of 50mm diameter using the stainless steel cable provided. The case is vented to compensate for barometric pressure variation.

At regular intervals, a highly reliable and stable silicon sensor is used to measure the pressure at the input and the result is written to memory. The recording interval is set by the user.

The logger is battery powered and is controlled by an internal microprocessor and clock calendar. Data is stored in reliable solid-state memory, which will retain data indefinitely without battery power. An external stainless steel connector allows logger programming and data retrieval without opening the case.

The unit is initialised from an IBM PC or compatible computer, running menu driven software. This software controls all logger functions including logger start-up time, the interval between readings, configuration, data down loading, data display and the printing of reports.



### FEATURES

- Rugged weather-proof case.
- No operator controls. All settings are initialised from the computer.
- Easy to use external download connection.
- User selectable memory usage: Overwrite or capture modes.
- Electronic systems are protected from water entry if the vent tube is damaged or immersed.
- Battery life of one year.
- Internal clock calendar controls start up time, date and sampling interval.
- Recording intervals from one reading every second to one every 18 hours.
- Memory capacity of 2000 readings.

### APPLICATIONS

- Logging ground water levels adjacent to open cut mines.
- Logging ground water levels in salination studies.
- Logging water levels in sumps.
- Logging river heights and tides.
- Recording fluid pressures in wet or corrosive environments.

# Water Level Logger

## SPECIFICATIONS

### Operating Ranges and Resolution

RANGE (mm)	RESOLUTION (mmH <sub>2</sub> O)
0 to 10,000	10
0 to 20,000	20

### Recording Modes

Capture mode (once through memory)  
Overwrite mode (continuous logging)  
Data allows 2000 recordings

### Timing Functions

Clock: crystal regulated to within 2 min/month  
Start of logging: up to 6 months after set-up  
Start time and date: Set to one second resolution  
Recording interval: 1 second to 18 hours between recordings (one second resolution)

### Case

Construction: welded stainless steel tube  
Size: 327 long x 44.5mm diameter  
Sealing: suitable for immersion in water

### Operating Temperature of Case

0 to + 50 Deg C

### Thermal Effect on Zero and Span

Less than +/- 1%

### Overload Capacity

1.5 times rated range without damage.  
40m max head without bursting.

### Battery Life (Typical)

Alkaline battery: 1 year  
Lithium battery: 3 years  
Low voltage warning: available in software  
Battery installation date: can be recorded in logger  
Battery not included as standard.

### Computer Connection

Custom stainless steel External Download (EDL) connector allows connection to the computer at any time without opening the case.

### Communications Kit

Includes:  
Software  
User manual  
Link cable  
(SOLD SEPARATELY)

### Software Features

Menu driven for ease of learning and use.  
Autodetection of video cards, no configuration.  
Controls all communication with the logger.

### Software Functions

Programming of logger for new run including:  
Start time and date  
Sampling interval  
Synchronising system clock  
Selecting memory usage (once through or continuous overwrite modes)  
Setting resolution (low-res or high-res mode)  
Downloading of recorded data to the host computer  
Display or printing of logger data (time and date stamped)  
Display or printing of user scaled graphs  
Checking of logger configuration  
Preparation of spreadsheet files for additional data  
Analysis, including multi-trace comparisons  
Setting of battery installation date

### Computer

IBM XT/AT or compatible with DOS2.1 or higher with minimum 512k RAM, 1 x 360k drive, 1 printer port, Herc, CGA, EGA or VGA.  
Printer: Epson FX, LQ or compatible.

### Weight

1100 grams.

### Dimensions

300mm x 45mm diameter.

### When ordering, please specify

8080-1-10 for logger with 0 to 10m range.  
8080-2-20 for logger with 0 to 20m range.  
8080-3 for lithium battery pack.  
8080-4 for communications kit.  
8080-5 vent/support cable.